L Number	Hits	Search Text	DB	Time stamp
2	24	dual adj (fir or adaptive adj filter)	USPAT;	2004/05/31 13:32
3	1015	long adj (tail or echo)	EPO; JPO USPAT;	2004/05/31 10:08
5	36525	echo	EPO; JPO USPAT;	2004/05/31 10:09
6	6	(dual adj (fir or adaptive adj filter)) and echo	EPO; JPO USPAT;	2004/05/31 10:12
7	5	((dual adj (fir or adaptive adj filter)) and echo) and reduc\$3	EPO; JPO USPAT; EPO; JPO	2004/05/31 10:22
10 .	183	long adj echo	USPAT; EPO; JPO	2004/05/31 10:22
8	7	long adj tail adj echo	USPAT; EPO; JPO	2004/05/31 10:29
12	17	("3787645" "4862449" "4868874" "5014263" "5084865" "5274705" "5311503" "5521908" "5526347" "5559881" "5631900" "5649010" "5663955" "5664011" "5675612" "5708474" "5790440").PN.	USPAT	2004/05/31 10:23
13	1687	long near2 tail or long near2 echo near2 tail	USPAT; EPO; JPO	2004/05/31 10:35
15	19940	(fir or adaptive adj filter)	USPAT; EPO; JPO	2004/05/31 10:31
16	10	(long near2 tail or long near2 echo near2 tail) same ((fir or adaptive adj filter))	USPAT; EPO; JPO	2004/05/31 10:31
17	2079	long near2 tail\$2 or long near2 echo near2 tail\$2	USPAT; EPO; JPO	2004/05/31 13:33
19	582	dual adj filter\$2	USPAT; EPO; JPO	2004/05/31 10:36
21	34	((fir or adaptive adj filter)) and (long near2 tail\$2 or long near2 echo near2 tail\$2)	USPAT; EPO; JPO	2004/05/31 10:58
23	3202	interpolat\$2 with filter	USPAT; EPO, JPO	2004/05/31 11:10
25	220	(long near2 tail\$2 or long near2 echo near2 tail\$2) and (interpolat\$2 with filter) interpolat\$2 adj filter	USPAT; EPO, JPO	2004/05/31 11:09
28	229 279109	emulat\$3 or duplicat\$3 or copy	USPAT, EPO, JPO	2004/05/31 11:11
29	279109	(interpolat\$2 adj filter) and (emulat\$3 or duplicat\$3 or copy)	USPAT; EPO; JPO	2004/05/31 12:47
30	107083	hybrid	USPAT; EPO; JPO	2004/05/31 11:12
31	107083	((interpolat\$2 adj filter) and (emulat\$3 or duplicat\$3 or copy)) and	USPAT; EPO; JPO USPAT;	2004/05/31 11:13
32	137392	hybrid emulat\$3 or duplicat\$3	EPO; JPO USPAT;	2004/05/31 11:13
33	4	(dual adj (fir or adaptive adj filter)) and (emulat\$3 or duplicat\$3)	EPO; JPO USPAT;	2004/05/31 12:51
34	6	("5690321" "5740256" "5754665" "5917921" "6084973"	EPO; JPO USPAT	2004/05/31 12:50
35	155	"6487295").PN. (emulat\$3 or duplicat\$3) and (long near2 tail\$2 or long near2 echo near2 tail\$2)	USPAT;	2004/05/31 12:51
36	67	hybrid and ((emulat\$3 or duplicat\$3) and (long near2 tail\$2 or long near2 echo near2 tail\$2))	EPO; JPO USPAT; EPO; JPO	2004/05/31 12:52
37	1	((fir or adaptive adj filter)) and (hybrid and ((emulat\$3 or duplicat\$3) and (long near2 tail\$2 or long near2 echo near2 tail\$2)))	USPAT; EPO; JPO	2004/05/31 12:52
38	23716	emulat\$3	USPAT; EPO; JPO	2004/05/31 12:55
39	354767	coefficient	USPAT; EPO; JPO	2004/05/31 12:55
40	203	emulat\$3 same coefficient	USPAT; EPO; JPO	2004/05/31 13:31
				L

41	50	hybrid and (emulat\$3 same coefficient)	USPAT;	2004/05/31 13:27
43	18	echo and (hybrid and (emulat\$3 same coefficient))	EPO; JPO USPAT;	2004/05/31 13:27
73	16	Same coefficients)	EPO; JPO	2004/03/31 13.27
45	20	(long near2 tail\$2 or long near2 echo near2 tail\$2) and emulat\$3	USPAT;	2004/05/31 13:13
"		(1015 Hours wilds of 1015 Hours of 1015 Hours wilds)	ЕРО; ЛРО	2004/03/31 13:13
46	3	coefficient and ((long near2 tail\$2 or long near2 echo near2 tail\$2) and	USPAT;	2004/05/31 13:13
		emulat\$3)	ЕРО; ЛРО	
51	0	(long near2 tail\$2 or long near2 echo near2 tail\$2) and (dual adj	USPAT;	2004/05/31 13:33
İ		filter\$2)	ЕРО, ЈРО	
52	1	5933797.pn.	USPAT;	2004/05/31 13:33
			ЕРО; ЈРО	
53	16	("5001661" "5151937" "5175702" "5297071" "5327459"	USPAT	2004/05/31 13:33
		"5371789" "5381357" "5388092" "5396299" "5396517"		
		"5526377" "5581494" "5631957" "5652903" "5721782"		
54	2083	"5745396").PN. long near2 tail\$2 or long near2 echo near2 tail\$2.ab.ti.	USPAT;	2004/05/21 12:42
] 34	2003	long hear 2 tang 2 or long hear 2 echo hear 2 tang 2.ao.ti.	EPO; JPO	2004/05/31 13:42
55	34	((fir or adaptive adj filter)) and (long near2 tail\$2 or long near2 echo	USPAT;	2004/05/31 13:38
""	"	near2 tail\$2.ab.ti.)	ЕРО; ЛРО	2004/05/51 15:50
56	4878	long adj delay	USPAT;	2004/05/31 13:38
			ЕРО; ЈРО	200 05/21 10:50
57	1	(dual adj (fir or adaptive adj filter)) and (long adj delay)	USPAT;	2004/05/31 13:38
			ЕРО, ЈРО	
68	2969	line adj card\$	USPAT;	2004/05/31 16:12
			ЕРО; ЈРО	
69	83330	pots	USPAT;	2004/05/31 15:50
70	261	11	ЕРО; ЈРО	
70	261	sdsl	USPAT;	2004/05/31 15:50
71	2368	adsl	ЕРО; ЈРО	2004/05/21 15:50
'1	2308	ausi	USPAT; EPO; JPO	2004/05/31 15:50
72	234	sdsl and adsl	USPAT;	2004/05/31 15:50
'-	231	basi ara aasi	ЕРО; ЛРО	2004/03/31 13.30
73	152	pots and (sdsl and adsl)	USPAT;	2004/05/31 15:50
		, , ,	EPO; JPO	
74	52	(line adj card\$) and (pots and (sdsl and adsl))	USPAT;	2004/05/31 15:50
		**************************************	ЕРО; ЛРО	
75	1	(line adj card\$) with pots with adsl with sdsl	USPAT,	2004/05/31 16:12
	_		ЕРО; ЈРО	
76	75	line adj card\$ same pots same \$dsl	USPAT;	2004/05/31 16:13
77	000240	16: .1	ЕРО; ЈРО	
77	800340	multiple	USPAT;	2004/05/31 16:13
78	44	(line adj card\$ same pots same \$dsl) and multiple	ЕРО; ЛРО	2004/05/21 16:24
/ 0	44	(time adj cards same pots same sust) and multiple	USPAT;	2004/05/31 16:24
79	· 14	(line adj card\$ same pots same \$dsl) and adsl and sdsl	EPO; JPO USPAT;	2004/05/31 16:25
'	14	(mic acj cardo same pos same ousi) and adsi and sasi	EPO; JPO	2004103/31 10.23
		<u> </u>	1 20, 31 0	L

Patent Assignment Abstract of Title

Total Assignments: 2

Application #: 09939439 **Filing Dt:** 08/24/2001 Patent #: NONE **Issue Dt:**

PCT #: NONE Publication #: NONE Pub Dt:

Inventors: Robin Levonas, Hai Liu Title: Hybrid echo canceller

Assignment: 1

Reel/Frame: 012121/0060 Received. 09/04/2001 Recorded: Mailed: Pages:

08/24/2001 11/02/2001

Conveyance: ASSIGNMENT OF ASSIGNORS INTEREST (SEE DOCUMENT FOR DETAILS).

Assignors: LEVONAS, ROBIN Exec Dt: 08/24/2001

> Exec Dt: 08/24/2001 LIU, HAI

Assignee: GLOBESPAN, INC.

100 SCHULZ DRIVE

RED BANK, NEW JERSEY 07701

Correspondent: THOMAS, KAYDEN, HORSTEMEYER, ET AL

ROBERT A. BLAHA

100 GALLERIA PARKWAY, SUITE 1750

ATLANTA, GA 30339-5948

Assignment: 2

Reel/Frame: 012540/0103 Received: 02/14/2002 Recorded: Mailed: Pages:

01/30/2002 04/02/2002

Conveyance: CHANGE OF NAME (SEE DOCUMENT FOR DETAILS).

Assignor: GLOBESPAN, INC. Exec Dt: 12/14/2001

Assignee: GLOBESPAN VIRATA, INC.

100 SCHULZ DRIVE

RED BANK, NEW JERSEY 07701

Correspondent: THOMAS, KAYDEN, HORSTEMEYER & RISLEY

L.L.P.

DANIEL R. MCCLURE

100 GALLERIA PARKWAY, SUITE 1750

ATLANTA, GA 30339-5948

Search Results as of: 5/31/2004 1:03:59 P.M.

If you have any comments or questions concerning the data displayed, contact OPR / Assignments at 703-308-9723 Web interface last modified: Oct. 5, 2002

L Number	Hits	Search Text	DB	Time stamp
2	24	dual adj (fir or adaptive adj filter)	USPAT;	2004/05/31 13:32
	24	dual adj (III of adaptive adj IIIter)	EPO; JPO	2004/03/31 13.32
3	1015	long adj (tail or echo)	USPAT;	2004/05/31 10:08
'	1015	tong adj (tan or ecito)	EPO; JPO	2004/03/31 10.08
5	36525	echo	USPAT;	2004/05/31 10:09
	30323	CONO	EPO; JPO	2004/03/31 10:07
6	6	(dual adj (fir or adaptive adj filter)) and echo	USPAT;	2004/05/31 10:12
ا	Ĭ	(daming (in or adaptive adj inter)) and conto	ЕРО; ЈРО	2004/03/31 10.12
7	5	((dual adj (fir or adaptive adj filter)) and echo) and reduc\$3	USPAT;	2004/05/31 10:22
		((compared and most)) and come, and reduces	ЕРО; ЛРО	200 1103/31 10:22
10	183	long adj echo	USPAT;	2004/05/31 10:22
			ЕРО; ЛРО	
8	7	long adj tail adj ećho	USPAT;	2004/05/31 10:29
			ЕРО, ЛРО	
12	17	("3787645" "4862449" "4868874" "5014263" "5084865"	USPAT	2004/05/31 10:23
		"5274705" "5311503" "5521908" "5526347" "5559881"		
		"5631900" "5649010" "5663955" "5664011" "5675612"		
		"5708474" "5790440").PN.		
13	1687	long near2 tail or long near2 echo near2 tail	USPAT;	2004/05/31 10:35
			ЕРО; ЈРО	
15	19940	(fir or adaptive adj filter)	USPAT;	2004/05/31 10:31
			ЕРО; ЈРО	
16	10	(long near2 tail or long near2 echo near2 tail) same ((fir or adaptive adj	USPAT;	2004/05/31 10:31
,_	2050	filter))	ЕРО, ЛРО	
17	2079	long near2 tail\$2 or long near2 echo near2 tail\$2	USPAT;	2004/05/31 13:33
10	592	dual adi Citanta	ЕРО; ЛО	2004/05/21 10:26
19	582	dual adj filter\$2	USPAT;	2004/05/31 10:36
21	34	((fir or adaptive adj filter)) and (long near2 tail\$2 or long near2 echo	EPO; JPO USPAT;	2004/05/31 10:58
- 1	34	near2 tail\$2)	ЕРО; ЛРО	2004/03/31 10.36
23	3202	interpolat\$2 with filter	USPAT;	2004/05/31 11:10
	3202	morpolates vital litter	ЕРО; ЛРО	2004/03/31 11:10
24	5	(long near2 tail\$2 or long near2 echo near2 tail\$2) and (interpolat\$2	USPAT;	2004/05/31 11:09
		with filter)	ЕРО; ЛРО	
25	229	interpolat\$2 adj filter	USPAT;	2004/05/31 11:11
			ЕРО, ЛРО	
28	279109	emulat\$3 or duplicat\$3 or copy	USPAT;	2004/05/31 12:47
		·	ЕРО; ЈРО	
29	66	(interpolat\$2 adj filter) and (emulat\$3 or duplicat\$3 or copy)	USPAT;	2004/05/31 11:12
			ЕРО; ЈРО	
30	107083	hybrid	USPAT;	2004/05/31 11:13
_,		(/' / 1 /00 1' C1/) 1 / 1 /00 1 1' /00 1	EPO; JPO	
31	4	((interpolat\$2 adj filter) and (emulat\$3 or duplicat\$3 or copy)) and	USPAT;	2004/05/31 11:13
32	137392	hybrid emulat\$3 or duplicat\$3	EPO; JPO USPAT;	2004/05/21 12:54
32	13/372	ставать от априсаць	EPO; JPO	2004/05/31 12:54
33	4	(dual adj (fir or adaptive adj filter)) and (emulat\$3 or duplicat\$3)	USPAT;	2004/05/31 12:51
"	7	(come and (in or adaptive and inter)) and (chiminate) or duplicate)	EPO; JPO	2004103/31 12.31
34	6	("5690321" "5740256" "5754665" "5917921" "6084973"	USPAT	2004/05/31 12:50
	J	"6487295").PN.		200 11 03/31 12.30
35	155	(emulat\$3 or duplicat\$3) and (long near2 tail\$2 or long near2 echo	USPAT;	2004/05/31 12:51
		near2 tail\$2)	EPO; JPO	
36	67	hybrid and ((emulat\$3 or duplicat\$3) and (long near2 tail\$2 or long	USPAT;	2004/05/31 12:52
		near2 echo near2 tail\$2))	ЕРО; ЛРО	
37	1	((fir or adaptive adj filter)) and (hybrid and ((emulat\$3 or duplicat\$3)	USPAT;	2004/05/31 12:52
		and (long near2 tail\$2 or long near2 echo near2 tail\$2)))	ЕРО; ЛРО	
38	23716	emulat\$3	USPAT,	2004/05/31 12:55
			ЕРО; ЈРО	
39	354767	coefficient	USPAT;	2004/05/31 12:55
	***		ЕРО; ЛРО	
40	203	emulat\$3 same coefficient	USPAT;	2004/05/31 13:31
Ll			ЕРО; ЈРО	<u> </u>

41	50.	hubmid and (annulat@2 annu ann@inimat)	LICDAT.	2004/05/31 13:27
41	30.	hybrid and (emulat\$3 same coefficient)	USPAT;	2004/03/31 13:27
43	10		ЕРО; ЛРО	2004/05/21 12:27
43	18	echo and (hybrid and (emulat\$3 same coefficient))	USPAT;	2004/05/31 13:27
4.5	20	(1 0 1 100 1 0 1 100 1 1 100	ЕРО; ЛРО	
45	20	(long near2 tail\$2 or long near2 echo near2 tail\$2) and emulat\$3	USPAT;	2004/05/31 13:13
	_		ЕРО; ЛРО	
46	3	coefficient and ((long near2 tail\$2 or long near2 echo near2 tail\$2) and	USPAT;	2004/05/31 13:13
		emulat\$3)	ЕРО; ЛРО	
51	0	(1911 1911 minds of 1918 ments only ments minds) and (admit an)	USPAT;	2004/05/31 13:33
		filter\$2)	ЕРО; ЛРО	
52	1	5933797.pn.	USPAT;	2004/05/31 13:33
			ЕРО; ЛРО	
53	16	("5001661" "5151937" "5175702" "5297071" "5327459"	USPAT	2004/05/31 13:33
		"5371789" "5381357" "5388092" "5396299" "5396517"		
	1	"5526377" "5581494" "5631957" "5652903" "5721782"		
		"5745396").PN.		
54	2083	long near2 tail\$2 or long near2 echo near2 tail\$2.ab.ti.	USPAT;	2004/05/31 13:42
			ЕРО; ЛРО	
55	34	((fir or adaptive adj filter)) and (long near2 tail\$2 or long near2 echo	USPAT;	2004/05/31 13:38
		near2 tail\$2.ab.ti.)	ЕРО; ЛРО	
56	4878	long adj delay	USPAT;	2004/05/31 13:38
			ЕРО; ЛРО	
57	1	(dual adj (fir or adaptive adj filter)) and (long adj delay)	USPAT;	2004/05/31 13:38
			ЕРО; ЛРО	